



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/816,093 | 04/01/2004 | Derek Wyatt | 3084.EEM | 9478 |

7590 12/14/2006
JANE E. GENNARO
National Starch and Chemical
10 Finderne Avenue
Bridgewater, NJ 08807

| EXAMINER | |
|-------------------------|--------------|
| BRUENJES, CHRISTOPHER P | |
| ART UNIT | PAPER NUMBER |
| 1772 | |

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,093

Applicant(s)

WYATT, DEREK

Examiner

Christopher P. Bruenjes

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S.C. 102 rejections of claims 1-5 as anticipated by Van Dyke et al of record in the Office Action mailed May 23, 2006, Pages 2-3 Paragraph 4, have been withdrawn due to Applicant's amendments in the Paper filed October 3, 2006.

2. The 35 U.S.C. 103 rejections of claims 1-7 over Van Dyke et al in view of Bergner of record in the Office Action mailed May 23, 2006, Pages 4-6 Paragraph 7, have been withdrawn due to Applicant's amendments in the Paper filed October 3, 2006.

3. The 35 U.S.C. 103 rejections of claims 1-5 over Batson of record in the Office Action mailed May 23, 2006, Pages 6-8 Paragraph 8, have been withdrawn due to Applicant's amendments in the Paper filed October 3, 2006.

4. The 35 U.S.C. 103 rejections of claims 1-4, 6-7 over Batson in view of Okamoto of record in the Office Action mailed May 23, 2006, Pages 8-10 Paragraph 9, have been withdrawn due to Applicant's amendments in the Paper filed October 3, 2006.

Art Unit: 1772

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-4, 7, and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hull et al (WO 91/01711 A1) in view of Okamoto et al (JP 08-057051 A).

Regarding claims 1, 7, and 10, Hull et al teach a method for storing adhesive compositions (p.1, 1.2-4). The method includes dispensing an uncured adhesive into a container, freezing the adhesive within the container and storing the

Art Unit: 1772

adhesive while frozen (p.3, 1.26 - p.4, 1.6). The container is formed of a thermoplastic material (p.5, 1.1-8). The container has a thickness of approximately 0.035 inches based on calculations of the inner diameter to the outer diameter of the container of example 1 (p.6, 1.35-36).

Hull et al fail to teach that the wall of the container is roughened to have a mean roughness value of greater than 0.3 micrometers. However, Okamoto et al teach that the inner surface of the wall of a syringe is roughened in order to decrease the sliding friction between the gasket of the plunger and the syringe outer wall so that the material within the syringe can more easily be dispensed from the syringe (p.1-2, paragraphs 3 and 4 and p.3, paragraph 15 of new machine translation). Okamoto et al teach that the optimal mean roughness value of the inner surface of the syringe is 0.5 to 5 micrometers (p.3, paragraph 15 of new machine translation), which is greater than 0.3 micrometers. Okamoto et al further teach that the roughness is formed by mechanical abrasion such as sandpaper processing (p.3, paragraph 15 of new machine translation). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to roughen the inner surface of the wall of a syringe in order to decrease the sliding friction between the

Art Unit: 1772

gasket of the plunger and the syringe wall, which will enable the composition held in the syringe to be more easily dispensed, as taught by Okamoto et al.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to roughen the inner surface of the syringe of Hull et al by mechanical abrasion or sandpaper processing to have a mean roughness value greater than 0.3 micrometers, in order to improve the dispensability of the adhesive stored in the syringe by decreasing the sliding friction between the gasket of the plunger and the syringe wall, as taught by Okamoto et al.

Regarding claims 2-3 and 11-12, the thermoplastic material is polypropylene (p.6, 1.35-36), which is injection moldable and has a flexural modulus of less than or equal to 1240MPa.

Regarding claims 4 and 13, the container is a syringe (p.5, 1.31).

Response to Arguments

8. Applicant's arguments with respect to claims 1-4, 7, and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1772

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. DiGregorio et al (US 2005/0236063 A1).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489.

Art Unit: 1772

The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
December 9, 2006


ALICIA CHEVALIER
PRIMARY EXAMINER